UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,065	10/04/2000	Peter Coad	30013630-0003	8737

23485   7590   03/31/2003

JINAN GLASGOW
P O BOX 28539
RALEIGH, NC 276118539

EXAMINER
CHUONG, TRUC T

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/680,065	COAD ET AL.
	Examiner	Art Unit
	Truc T Chuong	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-40*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) ☐ Other: .

DETAILED ACTION

Specification

1.   The abstract of the disclosure is objected to because the abstract is too short; therefore, it

does not give a good explanation of the invention. Correction is required. See MPEP

§ 608.01(b).

2.   Page 1, Applicant needs to provide serial numbers.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A Per Cederqvistson shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Per Cedrqvist et

al. (Version Management with CVS for CVS 1.11.3, 1992,1993).

As to claim 1, Per Cederqvist teaches a method in a data processing system for displaying

versions of source code, each version reflecting an instance in an edit history (1.1 What is CVS,

page 3), the method comprising the steps of:

determining a language of the source code (1.3.1 Getting the source, page 6, .c files

(backend.c, driver.c, ...) indicate that these source codes were written in C program);

storing indications of the edits to the source code (1.3.2 Committing your changes, page

6, and 1.3.4 Viewing differences, page 7);

converting the source code with the indications of the edits from the language into a

language-neutral representation (10.3 Conflicts example, page 62-64, shows differences between

old and modified versions of the program file);

using the language-neutral representation to display the source code in the language with

the indications of the edits; and using the language-neutral representation to display a

corresponding graphical representation (Per Cederqvist inherently teaches a graphical user

interface for operations because CVS can be run on different platforms including Windows

NT/95, 2.2.3 File Permission issues specific to Windows, page 12) of the source code with the

indications of the edits (>>>>> and <<<<<, page 63, indicate modified part of the code).

As to claim 2, Per Cederqvist teaches the method of claim 1, wherein the source code and

the corresponding graphical representation of the source code are displayed sequentially

($CVSROOT, page 11).

As to claims 3 and 8, Per Cederqvist inherently teaches the method of claim 1 wherein a

rate at which the source code with the indications of the edits is displayed is adjustable because

any editing screens of Microsoft Windows can be resized (adjustable) minimized, or maximized.

As to claims 4 and 9, Per Cederqvist teaches the method of claim 1, wherein the source

code with the indications of the edits is displayed in reverse order (10.2 Bringing a file up to

date, page 61, in first paragraph shows the newest revision of the file is extracted from the

repository and put in working directory).

As to claims 5 and 12, Per Cederqvist teaches the method of claim 1, wherein the

graphical representation is one of the group consisting of a class diagram (history files for each

version control, page 11), a use case diagram, a sequence diagram, a collaboration diagram, a

state transition diagram, an activity diagram, a package diagram, a component diagram and a

deployment diagram.

As to claim 6, Per Cederqvist teaches a method in a data processing system for displaying

versions of source code, each version reflecting an instance in an edit history, the method

comprising the steps of:

storing indications of the edits to the source code; and

displaying the versions of the source code with the indications of the edits (history

files, page 11).

As to claim 7, Per Cederqvist teaches the method of claim 6, wherein the versions of the

source code are displayed sequentially (pages 45-46).

As to claims 10, 13-15, they are similar in scope to claim 1 above; therefore, rejected

under similar rationale.

As to claim 16, Per Cederqvist teaches the method of claim 13, wherein the source code

is displayed after the source code with the edit is displayed (10.3 Conflicts example, page 62-64,

display a new version 1.7 after the source code has been modified).

As to claims 17-32, these are computer program product claims of method claims 1-16.

Note the rejections of claims 1-16 above respectively.

As to claim 33-37, and 39-44, these are system claims of method claims 1-4, 11, 5-6.

Note the rejections of claims 1-4, 11, 5-6 above respectively.

As to claim 38, Per Cederqvist teaches the data processing system of claim 37, wherein

the memory device further comprises a transient meta model, wherein said transient meta model

stores the language neutral representation of the source code (2. The Repository, page 9).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang et al. (U.S. Patent No. 5,428,729) teach versions, debug, history, and edit (cols. 3-11 and figs. 4-7).

DaSilva et al. (U.S. Patent No. 6,493,868 B1) teach edit, versions, source code, modifying, and development tool (cols. 1-29 and figs. 4-7).

Kelbaugh et al. (U.S. Patent No. 2002/0049962 A1) teach different versions, display, source code, and development (pages 1-16 and figs. 6-18).

Leblang et al. (U.S. Patent No. 5,649,200) teach version control system, memory, modifying, and version match (cols. 1-35 and figs. 6-24).

Minard (U.S. Patent No. 6,247,020 B1) teaches development/debugging tools, versions, and GUI (cols. 3-13 and figs. 3-7).

Pike (U.S. Patent No. 5,579,469) teaches modifying code, different versions, editing, and display (cols. 2-9 and figs. 1-11). .

Razdow et al. (U.S. Patent No. 6,330,008 B1) teach different versions, display, and debugging source code (cols. 2-41 and figs. 1-52).

Tsuchiya (U.S. Patent No. 5,555,410) teaches history, edit software, and versions (cols. 4-15 and figs. 5-50).

Byun et al. (High-Level CHILL Debugging System in Cross-Development

Environments, IEEE 1998) teach different versions, source code, and indicators (pages

211-216).

Koike et al. (VRCS: Integrating Version Control and Module Management using

Interactive Three-Dimensional Graphics, IEEE 1997) teach software versions, history,

menu, and GUI (pages 168-173).

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Truc T Chuong whose telephone number is 703-305-5753. The

examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kristine L. Kincaid can be reached on 703-308-0640. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-7239 for regular

communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

Truc T. Chuong
March 24, 2003

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100